astrium
Space Infrastructure

Software Release Notes

Titel:
Title:

Columbus Ground System (CGS) Release Notes V5.0.1

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1 Identification of Delivery

This delivery contains the nessessary files to install the Columbus Ground System (CGS) CI Number 1214 597, in its version CGS_V5.0.1

This Version is the first complete delivery of the CGS ported to ADA 95 (GNAT) and Oracle 8.1.7 with the functionality of CGS Version 4.5 (with exceptions listed in chapter 8) extended by Cryosat Requirements and ATV–TF requirements.

The version includes fixes to a number of corrections to overcome problems reported in SPRs (see below).

Note: All SPRs fixed in CGS_4.5.0 are also fixed in this version.

The delivery comprises a CGS system with the following components:

- CGSI
- CLS
- DBS
- GWDU
- HCI
- MDA / MDB_V5_0_0
- NWSW
- TES
- TSCV
- TEV
- TSS
- CGS_API

The following products are not part of this delivery:

- CSS
- FWDU
- SWES

2 List of fixed SPRs

2.1 List of SPRs

SPRs **fixed** in this delivery and formally **released**:

ID	TITLE	PRODUC
SPR–1066	unsigned 32bit integer implementation in UCLC	CLS
SPR–5876	BITSET Range Problem	CLS
SPR–6745	DBS Local Data File Locations	DBS
SPR–7800	Communication with test node fails during operation	DBS
SPR–7889	TEV lock file(s)	TEV
SPR–8696	GWDU–Editor send no warning message	GWDU
SPR–8898	No Delta limit sets in Monitoring and GO/NOGO window	CGS
SPR–9089	install_cgsi takes y as directory for Tcl/Tk	CGSI
SPR–9186	”Check MDB Item”–Tool: Bad error message	MDA
SPR–9335	ENH: TES_API.Read_Engineering_Value improvements	TES
SPR–9668	Error recovery after HCI crash	HCI
SPR–9785	Set_processing OFF does not switch monitoring OFF	TES
SPR–9882	Export problem with splitting paramfile	MDA
SPR–9886	TES API without timeouts	TES
SPR–9908	”Internal error: ARITHMETIC_ERROR” in CLS Editor	CLS
SPR–9924	HCI Screen Setup Problems	HCI
SPR–9927	IMDB: Display of foreign key items	MDA
SPR–10050	TC with defined TC/GDU ”Command Verification” fails	TES
SPR–10193	I_MDB: Wrong node selection for CCU	MDA
SPR–10197	SAS_FILE_IO does not connect to TES CGS V5	CGS
SPR–10284	TSCV/HCI can not create TEV directory	TEV
SPR–10288	Error during MDB export	MDA
SPR–10289	Misleading error msg when overwriting housekeeping value	HCI
SPR–10311	Error reported by installer.tcl	CGSI
SPR–10312	Wrong version ID	CGSI
SPR–10314	PNS can not create log file	MDA
SPR–10319	Could not start TSS after installation	TSS
SPR–10321	install_cgsi fails to extend init<SID>.ora	CGSI
SPR–10325	Usage of dbs_cshrc – definition of printers	CGSI
SPR–10328	File–IO–SAS: READ_MESSAGE_FROM_SAS : timeout	CGS
SPR–10331	Debug output in TEV	TEV
SPR–10333	Exception raised in TEV events logging	TEV
SPR–10335	TEV did not start	TEV
SPR–10339	Derived Values (PUS ADUs) not processed	MDA
SPR–10340	Too large sort area in initoracle.ora	CGSI
SPR–10341	Unsigned_Integer_SW_Variable not implemented in GWDU	GWDU
SPR–10342	DDED crashes with oracle error	MDA
SPR–10346	HLCL: Internal error in CHECK	CLS
SPR–10348	CC abnormal terminated	MDA
SPR–10357	HCI crash after abort_all_aps	HCI
SPR–10359	CLS Batch returns wrong compilation result	MDA
SPR–10361	TEV could not start the fa_sas	TEV
SPR–10365	Test software (SAS_TMTC) not ok	CGS

ID	TITLE	PRODUC
SPR–10373	DDED – can’t save binary definition values	MDA
SPR–10377	Incorrect time error	CGS
SPR–10388	BDE Load Failure	MDA
SPR–10393	Database Error during deletion of an frozen CDU test version	MDA
SPR–10399	Data requirement differences between Load_Scoe and I_MDB	MDA
SPR–10407	generate_scoe: PUS_TC: Illegal CALIBRATION_ALTERNATIVE	MDA
SPR–10425	PUS TC wrong defined in scoe files	MDA
SPR–10434	The size for byte_streams in scoe data stored in bits	CGS
SPR–10435	Bde Load fails	CGS
SPR–10439	ADT_CCSDS_PACKET.LIMIT_VIOLATION erroneous	HCI
SPR–10453	TEV Raw Data Dump does not work with User Events	TEV
SPR–10461	install:user does not call tev_build_user_data	CGSI
SPR–10466	TEV: Internal Error in Final Archive Tool	TEV
SPR–10470	BDE Load Raises Constraint_Error	MDA
SPR–10482	TEV_SAS	TEV
SPR–10491	I_MDB: Badly formed error message	MDA
SPR–10503	I_MDB: ”DATABASE LOCK ERROR” window appears if not owner	MDA
SPR–10527	New session not visible	TEV
SPR–10528	No scrollbar for Execution Sessions List	TEV
SPR–10529	Select GDU’s does not work	TEV
SPR–10533	TEV: Packet Navigator Displays Packet Twice	TEV
SPR–10576	File Chooser in HCI crashes with core dump	HCI
SPR–10588	I_MDB: Unable to Delete Derived Value	MDA

SPRs **partially fixed** in this delivery, and kept **formally open** for next delivery:

ID	TITLE	PRODUCT

2.2 Covered Quick Patches

N/A

2.3 List of Issues

Change–Issues (as used within CGS PDB) implemented in this release. Mainline: cgs_5.0

Baseline/Checkpoint: CGS_5.0.1.5 (cgsivq)

Status	Author	CHANGE–ID	DATE	SYNOPSIS

(refer to attachment)

3 Documents

3.1 Installation Manuals

CGS–RIBRE–SUM–0002:	CGS Installation Manual, Issue 1/–, 19.10.2001(for CGS_5.0.1)

3.2 User Manuals

CGS–RIBRE–SUM–0001:	CGS User Manual, Issue 1/–, 29.10.2001 (for CGS_5.0.1)
COL–RIBRE–MA–0030–00	MDA Introduction Manual, Issue 3/B 4.4.1997
COL–RIBRE–MA–0031–00	MDA Reference Manual, Issue 4/D 26.06.2001
COL–RIBRE–MA–0018–00	MDA Administration Manual, Issue 4/B 31.03.2000
COL–RIBRE–MA–0037–00	DADIMA Introduction Manual, Issue 3/– 4.4.1997
COL–RIBRE–MA–0032–00	DADIMA Reference Manual, Issue 4/– 1.9.1997
COL–RIBRE–MA–0036–00	DADIMA Administration Manual, Issue 4/– 1.9.1997
COL–RIBRE–MA–0032–00	SID Range Tool Users and Operations Manual, Issue 1/– 15.09.1997
UM–114–001–ROV	GWDU User's Manual and Operations Manual, Issue 1.4 , 1999

3.3 Reference Manuals

CGS–RIBRE–STD–0001	User Control Language (UCL) Reference Manual, Issue 1/–, 11.10.2001
CGS–RIBRE–STD–0002	High Level Command Language (HLCL) Reference Manual, Issue 1/–, 11.10.2001
COL–RIBRE–STD–0008	Reference Manual for Crew Procedure Language and Software, Commanding, Issue 1/E, 1998

3.4 Requirements Specifications

CGS–RIBRE–SPE–0001	Columbus Ground System (CGS) Requirement Specification, Issue 1/–, 17.9.2001

3.5 Design Documentation

COL–RIBRE–ADD–0006	Columbus Ground System (CGS) Software Architectural Design Document, Issue 4/B, 30.10.1998

3.6 Interface Definitions

COL–RIBRE–ICD–0025–00 System to CGS ICD, 4/B, 31.08.2000
Issue 4/B, 31.08.2000

+ IRNs

COL–RIBRE–IRN–CGS–8068 Issue 1/C	Commercial Baseline Update:VADS 6.2.3.d / TCLTK
COL–RIBRE–IRN–CGS–8096 Issue 1/B	TES_API: Add overlayed acknowledge procedure
COL–RIBRE–IRN–CGS–8100 Issue 1/C	SWEU/SWRU Load Interface
COL–RIBRE–IRN–CGS–8105 Issue 1/B	UCL System Library Extensions/Updates
COL–RIBRE–IRN–CGS–8109 Issue 1/–	CALIBRATION:discrete ranges/256 statecodes
COL–RIBRE–IRN–CGS–8110 Issue 1/–	ADT_GDU_DESCR: critical command
COL–RIBRE–IRN–CGS–8114 Issue 1/–	ADT_PACKET_RESULT
COL–RIBRE–IRN–CGS–8115 Issue 1/–	ADT_EVENT_RESULT
COL–RIBRE–IRN–CGS–8117 Issue 1/–	ADT_DBS_TO_SAS_COMMAND
COL–RIBRE–IRN–CGS–8118 Issue 1/–	add HK for LT_SYNC_STATUS
COL–RIBRE–IRN–CGS–8119 Issue 1/–	Interface CSS/CMAS for COF Trainer
COL–RIBRE–IRN–CGS–8122 Issue 1/–	New SWES Home
COL–RIBRE–IRN–CGS–8123 Issue 1/–	ADT_CCSDS_PACKET
COL–RIBRE–IRN–CGS–8124 Issue 1/–	New UCL Lib: GROUND_VALUES
COL–RIBRE–IRN–CGS–8125 Issue 1/–	Cshrc
COL–RIBRE–IRN–CGS–8126 Issue 1/–	MPS_DEFINITIONS
COL–RIBRE–IRN–CGS–8129 Issue 1/–	ADT_GDU_DESCRIPTION
COL–RIBRE–IRN–CGS–8130 Issue 1/–	OPCODES as part of CGS_API
COL–RIBRE–IRN–CGS–8131 Issue 1/–	CSS/CMAS Interface: MODEL_CONNECTION
COL–RIBRE–IRN–CGS–8200 Issue 1/B	Commercial Baseline for CGS_5.0.1
COL–RIBRE–IRN–CGS–8205 Issue 1/–	UCL: Mathematical Libraries
COL–RIBRE–IRN–CGS–8206 Issue 1/–	CGSI Error Services
COL–RIBRE–IRN–CGS–8207 Issue 1/–	TN_HOME
COL–RIBRE–IRN–CGS–8209 Issue 1/A	MPS_DEFINITIONS
COL–RIBRE–IRN–CGS–8210 Issue 1/–	ADTs
COL–RIBRE–IRN–CGS–8212 Issue 1/–	VICOS_DEFINITIONS
COL–RIBRE–IRN–CGS–8217 Issue 1/–	UCL Ground Library Adaptations
COL–RIBRE–IRN–CGS–8218 Issue 1/–	ADTs for PUS
COL–RIBRE–IRN–CGS–8219 Issue 1/–	ADT_CCSDS_PACKET for PUS
COL–RIBRE–IRN–CGS–8222 Issue 1/–	TES_API

COL–RIBRE–ICD–0069–00 MDB Standard Entities and Application Program Interface,

+ IRNs:

COL–RIBRE–IRN–CGS–8107 Issue 1/A	MDB Extensions for CGS 4.4.0
COL–RIBRE–IRN–CGS–8120 Issue 1/C	MDB Extensions for CGS 4.5.0
COL–RIBRE–IRN–CGS–8201 Issue 1/A	MDB Extensions for CGS 5.0.0 (Double Float,Unsigned)
COL–RIBRE–IRN–CGS–8215 Issue 1/B	MDB Extensions for CGS 5.0.1 (PUS)

4 Platforms/Environments supported

The commercial environment required to execute CGS_V5.0.1 is defined in the referenced ICD.

The platforms are **SUN Ultra** machines supporting **Solaris 7 or Solaris 8**.

See also chapter 8 for updated commercial baseline.

Note that no support for HP_UX is implemented in this version of CGS

5 Installation of the CGS Delivery

5.1 Installation

The installation is to be performed for a full CGS system installation, see CGS Installation Manual.

To prepare the installation, the new `configurator` program must be called to define the installation parameters.

6 Post Installation Steps

6.1 MDB Updates

The CGS V5 MDB is considered to be compatible to CGS V4 (Oracle 7) MDB: Data may be exported from CGS V4.4.x or V4.5.x to CGS_V5.0.1 after upgrading the structure.

For upgrade procedure refer to CGS Installation Manual.

6.2 Install New UCL Libraries / Recompile APs

6.2.1 UCL System Libraries

The **GROUND_LIBRARY** has been updated in this delivery (refer to COL–RIBRE–IRN–8217). The source code of the library is delivered as UNIX file under $CGS_HOME/lib/ucl. It has to be replaced in the MDB at all locations, where the onboard library exists. Subsequent compilation of all libraries/APs referencing the library is needed.

Two new UCL system libraries are delivered with this version: **MATH_LIB (math_lib_.ucl)** and **MATH_LIB_LONG (math_lib_long_.ucl)**. They implement mathematical functions, such as sin,cos,tan etc for usage in UCL (APs) and HLCL. Operations are available for real types (math_lib) and log_real types (math_lib_long). Following operations are available (analog for long real types):

```
function Last_Exception : Exception;
function Sqrt    (X     : Real) : Real;
function Log     (X     : Real;
                  Base  : Real) : Real;
function LogLn   (X     : Real) : Real;
function Exp     (X     : Real) : Real;
function Power   (Left  : Real;    Right : Real) : Real;
function Sin     (X     : Real) : Real;
function Sin2    (X     : Real;  Cycle : Real) : Real;
function Cos     (X     : Real) : Real;
function Cos2    (X     : Real;    Cycle : Real) : Real;
function Tan     (X     : Real) : Real;
function Tan2    (X     : Real;    Cycle : Real) : Real;
function Cot     (X     : Real) : Real;
function Cot2    (X     : Real;  Cycle : Real) : Real;
function Arcsin  (X     : Real) : Real;
function Arcsin2 (X     : Real;   Cycle : Real) : Real;
function Arccos  (X     : Real) : Real;
function Arccos2 (X     : Real;  Cycle : Real) : Real;
function Arctan  (Y     : Real;  X     : Real  := 1.0) : Real;
function Arctan2 (Y     : Real;     X     : Real  := 1.0;  Cycle : Real) :  Real;
function Arccot  (X     : Real; Y     : Real  := 1.0) : Real;
function Arccot2 (X     : Real; Cycle : Real) :   Real;
function Sinh    (X     : Real) : Real;
function Cosh    (X     : Real) : Real;
function Tanh    (X     : Real) : Real;
function Coth    (X     : Real) : Real;
function Arsinh  (X     : Real) : Real;
function Arcosh  (X     : Real) : Real;
function Artanh  (X     : Real) : Real;
function Arcoth  (X     : Real) : Real;
function Random         : Real;    — from 0.0 to 1.0
function Random_I       : Integer; — full range
```

Note that the place of the libraries in the file system has changed compared to CGS_V4: `Directory: $GSAF_HOME/cgs/lib/ucl`

Library Replacement

The source code for the new version of the libraries must be installed in the database (MDB) and replace any old version of the Library.

As the Library may exist in different locations in your database, it is necessary to search for all locations and replace it everywhere within the MDB. To achieve this, perform the following steps:

1. Start I_MDB Navigator ("Test Preparation" in CGS Task Selector).
2. For each element configuration the following steps shall be done:
3. For each system tree version the following steps shall be repeated as well:
4. In those cases where the Library is part of a frozen CDU, you will have to create a new CDU version first (otherwise the library would be read–only and thus could not be updated).
5. In those cases where the library has not been frozen, simply replace the old source code by the new, as described below.
6. Navigate to the library end item. You may want to use the File→Direct End Item Access search facility of I_MDB to locate all libraries within a CDU automatically: Simply type UCL_SYSTEM_LIBRARY into the "End Item Type" field of the "Direct End Item Access" window and click on Search & Edit. The Items list in the lower half of the window then displays all UCL System Libraries in the currently open CDU.
7. Start the CLS Editor by using the "UCL Compiler & Editor..." menu point from the pop–up menu that is displayed after pressing the right mouse button on the library end item.
8. In the CLS Editor, delete the old source code: Click four times (fast) on the source code window pane. This should select the whole source code. (Alternatively: Select first part of source code, scroll to end of the source code and select all with right mouse button). Then press the Cut key or use Edit→Cut from the editor's pop–up menu.
9. Insert the new source code via File→Include File... pop–up menu point: In the "Text:Include" window enter:

   ```
   Directory: $GSAF_HOME/cgs/lib/ucl
   ```

10. Now click on the "Include File" button. The new source code is then loaded into the CLS Editor. Then click on Command→Compile button.
11. After the compilation of the library is finished, click on the Command→Store button of the CLS Editor
12. Quit the CLS Editor.
13. In those cases where the library was part of a frozen CDU: All your CCUs that reference the old CDU need to be changed as well: They should now reference the newly created CDU instead of referencing the old obsolete one. Replace these references now using I_MDB. If the CCUs are frozen, you have to create new CCU versions first.
14. Re–compile all your APs that reference the new system libraries. If your APs are part of a frozen CDU, you will have to copy them into a new CDU version in advance. Otherwise you will not be able to store your recompiled code into the database.
15. Repeat the above steps for all system tree versions.
16. Repeat the above steps for all element configurations.

6.3 Generate SCOE Files

To activate changes in the generation of SCOE files recreate the SCOE files of all CCU with the MDB. Therefore perform following steps:

1. Start I_MDB Navigator (“Test Preparation” in CGS Task Selector).
2. For each element configuration the following steps shall be done:
3. For each system tree version the following steps shall be repeated as well:
4. select the CCU version and navigate to each enditem of type EGSE_TEST_CONFIGURATION. To simplify this work use the ”File”–>“Direct End Item Access” window, enter the enditem type EGSE_TEST_CONFIGURATION and press the ”Search&Edit” button. All enditem within this CCU of the given type will be listed in the lower part of the window.
5. select the enditems which are used to start the test configuration one by one and select from the pull down menu (with right mouse button) ”Tools”–>”Generate Scoe Files...”. The ”LoadSCOE” progress window will apear. Wait until the generation is finished, than press the ”Close” button.
6. Repeat the above steps, beginning with step 3 for all system tree versions.
7. Repeat the above steps, beginning with step 2 for all element configurations.
8. Exit I_MDB.

6.4 Adaptation of SAS

The CGS_API has been based on the **Ada95 GNAT** compiler. To ensure correct working of the SAS using the CGS_API, all SAS using the **TES_API are required to be compiled** using the CGS_API delivered . Refer to CGS Installation Manual.

As this version of CGS only supports SUN as testnodes, the portation of SAS running previously on HP might be necessary. Also, the compatibility of Ada83 code to Ada95 code has to be ensured. Adaptation to the changed TES_API migth be necessay (e.g. for increased time resolution of package CGS_CALENDAR)

7 Known Bugs and Workarounds

This chapter lists the major known bugs, limitations and problems in CGS_V5.0.1 It also supplies workarounds for most of the known problems.

7.1 List of open SPRs

(Refer to attachment)

7.2 Workarounds

(Refer to attachment)

8 Compatibility Issues

The following is a description of CGS 4.x to CGS_V5.0.1 compatibility and functional extensions implemented in CGS_5.

8.1 New Features in CGS 5.0.1

The following features in CGS 5 are new **relative to CGS version 4.5.0**

- Updated Commercial Baseline
  - New Version of Ada Compiler: GNAT 3.14 a1 supporting Ada 95
  - Solaris 7 (*)
    (*) CGS_V5.0.1 has been verified under Solaris 8 and found to be compatible. CGS V5.0.1 software is generated, however, under the Solaris 7 baseline.
  - TCL/TK Version 8.3.2
  - DataViews 9.9
  - Oracle 8.1.7
  - No Support for HP Test Nodes in this version (SUN as Test Nodes are supported)
- MDB Data Structures
  - All changes made to CGS_4.4 / CGS_4.5.0 implemented / merged
  - Support for Double Floats and Full 32 Bit Unsigned Integer
    - Make Enditem Types DOUBLE_FLOAT_MEASUREMENT, UNSIGNED_INTEGER_MEASUREMENT, DOUBLE_FLOAT_SW_VARIABLE, UNSIGNED_INTEGER_SW_VARIABLE available to VICOS/EGSE
    - New Enditem Types EGSE_DOUBLE_FLOAT_DERIVED_VALUE, EGSE_UNSIGNED_INT_DERIVED_VALUE
  - Support for Packet Utilisation Standard (PUS)
    - New Enditem Types: PUS_TC, PUS_ADU_DESRIPTION, STRUCTURE_ID
  - Nick Name as additional aggregate (30 character/ foreign key) for all enditems
  - PUS Parameter Number as additional aggregate for all measurements
- MDB Interactive Interface / MDA Functions
  - Extend the DADIMA tool to allow for easy upgrading of user defined structures to new CGS Version
  - DDED provides new window layout to ease navigation in aggregates
  - BDO (ASCII File generation) provides new selection window to allow for selective output of MDB data to files
  - No FWDU Tool available anymore(COL specific)
  - GWDU Batch/Upgrade Mode
    (Call GWDU for all synoptics to re–align with changes made to referenced data)
  - *”XML Report Generation” Tool provided as Utility for CGS*
    (User definable and printable reports on MDB Contents)

- TRDB Improvements
  - New functions: Add user file to test session in TRDB
  - Support for extended time resolution
- Measurements, TM
  - Double Float and Unsigned Integer as new measurements in ADUs
  - Double Float and Unsigned Integer as new software variables
  - Double Float and Unsigned Integer as new derived value types
  - PUS_ADU as new telemetry container with C–PUS specific secondary header
  - Time Resolution increased to nano seconds for ADU/Measurements
- Monitoring / Calibration / Data Processing
  - Measurements get always time tag from ADU, with extended time resolution to nanoseconds
- Stimuli, TC
  - PUS_TC as new telecommands with Cryosat specific secondary header
  - PUS_TC/PREDEFINED_TC allow for placement of online parameter in the TC headers
  - The following data types are now additionally supported for TC/Binary_Packet Parameter:
    - BYTE,WORD, LONG_WORD, UNSIGNED_INTEGER, LONG_REAL
  - Time Resolution increased to nano seconds for GDU Acknowlegments
- User Interface Updates
  - Adaptation to new enditem types (Synoptics, Monitoring Window)
  - New Installer/Configurator Program to ease CGS Installation
  - Nicknames in Item Chooser of HCI
  - Allow for filter specification in startup profile of message_handler
  - Support for new enditem types PUS_TC, PUS_ADU in Raw Data Dump
- HLCL/UCL Language Support
  - Provide Support on full 32 bit range on UCL Type UNSIGNED_INTEGER
  - Adaptations to DOUBLE_FLOAT enditem values
  - Support for new types BYTE, LONG_WORD, BYTE_STRING
  - NULL Statecode literal $$
  - New UCL System Library: Mathematical Functions (e.g. sin, cos, tan, ...) (see ch. 6)
  - Ground Library Updates: Adapt to new enditem types
- Software Development Support
  - Remove SWES product from CGS V5
- Test Evaluation
  - Support for new enditem types double_float/unsigned_integer in evaluation tools
  - Support for new enditem types PUS_TC, PUS_ADU in Raw Data Dump
- Simulation Model Execution (CSS)

  - Currently no support for CSS product
- External Interface
  - TES_API: Support for new enditem types (double_float, unsigned_integer)
  - TES_API: New procedures to add/retrieve user files to/from TRDB
  - TES_API: New CGS_CALENDAR: extended time resolution
  - TES_API: Support for new PUS enditem types (PUS_TC, PUS_ADU)
  - TES_API: Support for Nickname conversion
  - TES_API: New Procedure to start an AP from SAS

8.2 Old Features No Longer Available

- The SWES tool is deleted in this version
- The FWDU tool is not yet ported to the new environment
- The CSS tool is not yet ported to the new environment
- HP_UX based Test Nodes are not supported in this version
- The Old Consistency Checker (as used up to CGS_4.3.1) is no longer supported
  The new Consistency Checker as implemented in CGS_4.5.0 is to beused for all consistency checks.
- CGS_4.5.0 features not yet implemented:
  - Old MDB Reports (to be replaced by new reports based on XML)
  - CLS Syntax Help / Pathname Help
  - TEV_API / DBS_API

8.3 Incompatibilities with CGS 4.x Data

8.3.1 MDB Structures

Items stored in the MDB 4.x (x = 3,4,5) version may be exported to MDB_5.0.1 version, but not the other way round.

8.3.2 TRDB Structures

Due to a change in the time tag structures, archive and logging files (i.e. Test Sessions) generated under CGS_5.0.1 cannot be evaluated with CGS_4.x systems.

8.4 Upgrading to CGS 5.0.1

General

- Save user dependent configuration and data files

  There are configuration files such as
  – CGS Product Configuration Parameter files
  – User Profiles
  – Message Handler Properties
  – HCI Screen Setup Files
  – HLCL Login/Logout Sequences
  – HLCL Sequences stored in UNIX file system
  – TEV Evaluation Definition Files
  – TEV Result files
- Establish new commercial baseline (Solaris 7, Oracle 8.1.7, DataViews 9.9)
- Run CGS 5.0.1 installation procedure
- Configure CGS
  - Re–install old CGS configuration files
    (System Topology Table, User Profiles, etc)

To ensure correct working of your CGS environment and to avoid errors in your application after the upgrade please perform following tasks in addition:

MDB

There are some issues to follow when upgrading MDB 4.3.0 (CGS_4.3.1) resp. MDB_4.4.0 (CGS_4.4.1) to MDB_5.0.0:

- Upgrading of MDB Structure
  - Call upgrade script during installation of CGS_V5.0.1 (see Installation Manual)

```
cd $MDA_HOME/config/mdb/upgrade

upgrade [<ORACLE system password>
        [<ORACLE upgrade user>
        [<configuration filename for upgrade>
        [<path/filename exported data>]]]
```

```
<ORACLE system password>: Password of the ORACLE system account
<ORACLE upgrade user>: Username used while upgrading. This User MUST NOT
                       EXIST IN ORACLE BEFORE STARTING UPGRADE!
                       Otherwise the script's execution will be aborted.
<configuration filename for upgrade>: Without extension "*.config"
             This file contains the names of the MDB upgrade scripts.

            CGS_MDB_V4_3_0_to_CGS_MDB_V5_0_0

            CGS_MDB_V4_4_0_to_CGS_MDB_V5_0_0
```

```
<path/filename exported data>: PATH and FILENAME of the source data
                               previously exported to be upgraded but
                               WITHOUT THE TRAILING COUNTING NUMBER!
```

- Adaptation of MDB data
  - Insertion of the new **GROUND_LIBRARY, GROUND_VALUES,MATH_LIB** and **MATH_LIB_LONG** into the MDB
    (see above under Post–Installation)
  - Recompilation of Automated Procedures
    Note: Follow Release Notes for CGS_4.4.1 or CGS_4.5.0 with respect to adaptation of APs to changed parameter profile when upgrading from CGS_4.3.x
  - Re–generate Synoptics via GWDU batch mode
  - Re–run of the Consistency Checker
  - Re–create data for test nodes (see ”Generate SCOE files”)

SAS

Existing SAS developed for CGS_4.x will need portation to Ada95 and the GNAT compilation environment.

SAS are **required** to be recompiled with the latest CGS_API libraries (see above).

Appendix A: List of Open SPRs

Appendix B: Workarounds

Appendix C: List of Implemented Issues (CGS PDB)